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Carlos Schuler

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UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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*Ex parte* CARLOS SCHULER,  
STEVE PABOOJIAN,  
ANDREW CLARK,  
ANDREA ROURKE,  
JOANNE CURLEY,  
DON S. MINAMI, and  
DERRICK J. TUTTLE

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Appeal 2010-008514  
Application 09/731,316  
Technology Center 3700

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Before: JENNIFER D. BAHR, WILLIAM V. SAINDON, and  
MICHAEL J. FITZPATRICK, *Administrative Patent Judges*.

FITZPATRICK, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Carlos Schuler et al. (Appellants) appeal under 35 U.S.C. § 134(a) from a decision finally rejecting claims 1-18, 21, 23-29, 37-39, 43-49, 61 and 62. We have jurisdiction under 35 U.S.C. § 6(b).

We AFFIRM-IN-PART and enter NEW GROUNDS OF REJECTION.

*The Claimed Subject Matter*

According to Appellants, the claimed invention relates “to the field of powder extraction, and in particular to the extraction of powder from a receptacle to facilitate aerosolization of the powder.” Spec. 1. “Of particular interest to the [claimed] invention are dry powder dispersion devices that are able to aerosolize powdered medicaments for inhalation by the patient.” Spec. 1. Claim 1, reproduced below, is illustrative of the claimed subject matter.

1. A method for conditioning a packaged powder, the method comprising:

providing a receptacle having an enclosed chamber containing an amount of a powder;

providing at least one pulse of energy to the receptacle to increase the efficiency at which the powder may be extracted from the chamber; and

flowing a gas through the chamber to aerosolize the powder.

*Evidence*

The Examiner relies upon the following prior art references:

Abrams	US 5,694,920	Dec. 9, 1997
Smith	US 5,740,794	Apr. 21, 1998
Gonda	US 6,167,880 B1	Jan. 2, 2001
McGinn	WO 9944663	Sep. 10, 1999

*Rejections*

The Examiner makes the following rejections under 35 U.S.C.

§ 103(a):

- I. Claims 1, 3-7, 11, 15, 16-18, 21, 25-29, 38, 39, 45-49, 61, and 62 as unpatentable over Smith and McGinn. Ans. 3.
- II. Claim 2 as unpatentable over Smith, McGinn, and Gonda. Ans. 5.
- III. Claim 12 as unpatentable over Smith, McGinn, and Abrams. Ans. 6.
- IV. Claims 1, 8-11, 13-15, 23, 24, 26, 27, 37, 43-45, and 61 as unpatentable over Smith and Abrams. Ans. 6.

OPINION

*Rejection over Smith and McGinn*

Smith “relates to a method and apparatus for dispersing dry powder medicaments for inhalation by a patient.” Smith col. 1, lines 17-19. Similarly, McGinn “relates to inhalers for medicaments, and more particularly, to inhalers with arrangements for breaking up agglomerates of dry powder.” McGinn p. 1, lines 13-15.

The Examiner found that Smith teaches all limitations of claim 1 except for providing at least one pulse of energy. Ans. 3. The Examiner

further found that McGinn teaches providing a pulse of energy to release medicament. Ans. 3 (citing McGinn p. 24, lines 8-18). Appellants do not contest these factual findings. App. Br. 6; Reply Br. 7.<sup>1</sup> We adopt them.

The Examiner further found that it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Smith to include the step of McGinn (i.e., applying a pulse of energy) to release medicament for delivery to the patient. Ans. 3.

Appellants argue that the proposed combination of Smith and McGinn would not result in the claimed invention of claim 1 because a person of ordinary skill in the art, if modifying Smith in view of McGinn, would not be motivated to add a pulse of energy step as taught by McGinn and retain the flowing a gas step as taught by Smith. Instead, Appellants argue that a person of ordinary skill in the art would be motivated only to include McGinn's energy pulse step in lieu of Smith's gas flowing step. App. Br. 7.

In furtherance of that argument, Appellants point to the purposes of these steps as set forth in claim 1, namely:

providing at least one pulse of energy to the receptacle *to increase the efficiency at which the powder may be extracted from the chamber*; and

flowing a gas through the chamber *to aerosolize the powder*.

Claim 1 (emphasis added).

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<sup>1</sup> Appellants filed two Reply Briefs: (1) a June 29, 2009-filed Reply Brief; and (2) a June 23, 2009-filed Reply Brief. We have considered the arguments set forth in both Reply Briefs. However, all citations to Reply Brief herein are to the June 23, 2009-filed Reply Brief.

Appellants assert that “in McGinn, the application of a pulse of energy is for the purpose of aerosolization” and that one of ordinary skill in the art would not “have found it obvious to use two different types of aerosolization mechanisms in the same device.” App. Br. 6-7. We reject Appellants’ argument for multiple reasons.

First, contrary to Appellants’ argument, McGinn does not refer to “aerosolization” or any form of that word in the portion of McGinn cited by Appellants (i.e., p. 24, lines 16-20). Additionally, it does not appear to us that McGinn anywhere refers to “aerosolization” or any form of that word. *See generally* McGinn. Rather, McGinn discusses the application of a pulse of energy to increase the efficiency at which a medicament powder may be extracted. *See* McGinn p. 24, lines 16-18 (“This momentum energy pulse causes the dosage medicament powder to be released from the disc 100.”) After the energy pulse, the “user inhales the *freed powder* discharged from the mouthpiece.” McGinn, p. 24, lines 22-23 (emphasis added). Although the McGinn energy pulse may aerosolize some of the powder, its express purpose is to release or free the powder from aggregation,<sup>2</sup> which increases the efficiency at which the powder may be extracted during inhalation.

Second, Appellants’ argument appears to be premised on an erroneous claim construction, specifically that “to increase the efficiency at which the powder may be extracted from the chamber” and “to aerosolize the powder” are necessarily two different things and entirely mutually exclusive. They are not.

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<sup>2</sup> In fact, Appellants elsewhere concede that “McGinn et al teaches a method using a common pulse of energy ‘*to release medicament*’.” Reply Br. 7 (emphasis added).

Aerosolizing a powder in a chamber certainly increases the efficiency at which the powder could be extracted from the chamber. Additionally, increasing the efficiency at which the powder could be extracted from the chamber, for example by applying a pulse of energy to release aggregated powder as taught in McGinn, certainly may result in some of the powder particles becoming airborne. Thus, the claims do not preclude the “providing” step from resulting in some aerosolization or require that the “flowing” step is the only step that aerosolizes some powder.

Appellants’ arguments fail to apprise us of error in the Examiner’s rejection. As such, we sustain the rejection over Smith and McGinn of claim 1. Appellants do not raise any additional arguments with respect to claims 3-7 and 11, which ultimately depend from claim 1. App. Br. 10. As such, we also sustain the rejection over Smith and McGinn of claims 3-7 and 11.

Appellants argue each of independent claims 15, 46, and 61 under a separate heading but do not raise any arguments beyond those raised with respect to claim 1. App. Br. 9-10. As such, we sustain the rejection over Smith and McGinn of claims 15, 46, and 61. Appellants do not raise any additional arguments with respect to claims ultimately depending from independent claim 15, 46, or 61. App. Br. 10-11. As such, we also sustain the rejection over Smith and McGinn of claims 16-18, 21, 25-29, 47-49, and 62.

Claims 38 and 39, which were rejected over Smith and McGinn, depend from independent claim 37, which was not rejected over Smith and McGinn. Ans. 3. We reverse the rejection of claims 38 and 39 as unpatentable over Smith and McGinn.

*Rejection over Smith and Abrams*

The Examiner's rejection over Smith and Abrams is analogous to the rejection over Smith and McGinn discussed above.

The Examiner found that Smith teaches all limitations of claim 1 except for providing at least one pulse of energy to the receptacle. Ans. 6. The Examiner further found that Abrams teaches using a pulse of energy to deaggregate the medicament. Ans. 7 (citing Abrams col. 7, lines 42-44). Appellants do not contest these factual findings. App. Br. 8. We adopt them.

The Examiner further found that it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Smith to include the step of Abrams (i.e., providing a pulse of energy) to release/deaggregate medicament for delivery to the patient. Ans. 7.

As with the combination of Smith and McGinn, Appellants argue that the proposed combination of Smith and Abrams would not result in the claimed invention of claim 1 because a person of ordinary skill in the art, if modifying Smith in view of Abrams, would not be motivated to add a pulse of energy step as taught by Abrams and retain the flowing a gas step as taught by Smith. Instead, Appellants argue that a person of ordinary skill in the art would be motivated only to include Abram's energy pulse step in lieu of Smith's gas flowing step. App. Br. 8.

Appellants are employing the same flawed reasoning as with respect to the combination of Smith and McGinn. More specifically, despite their concession that Abrams discloses applying a pulse of energy "for deaggregation of the powder," Appellants go on to characterize Abrams as



teaching a pulse of energy to aerosolize. App. Br. 8. Based on this false premise, Appellants unpersuasively urge that a person of ordinary skill in the art would not add Abrams's pulse of energy to Smith without removing the gas flowing step of Smith.

Appellants' arguments fail to apprise us of error in the Examiner's rejection. As such, we sustain the rejection over Smith and Abrams of claim 1. Appellants do not raise any additional arguments with respect to claims 8-11, 13, and 14, which ultimately depend from claim 1. App. Br. 10-11. As such, we also sustain the rejection over Smith and Abrams of claims 8-11, 13, and 14.

Appellants argue each of independent claims 15, 37, and 61 under a separate heading but do not raise any arguments beyond those raised with respect to claim 1. App. Br. 9-10. As such, we sustain the rejection over Smith and Abrams of claims 15, 37, and 61. Appellants do not raise any additional arguments with respect to claims ultimately depending from independent claim 15, 37, or 61. App. Br. 10-11. As such, we also sustain the rejection over Smith and Abrams of claims 23, 24, 26, 27, and 43-45.

*Rejection over Smith, McGinn, and Gonda*

Appellants do not raise any arguments with respect to the rejection over Smith, McGinn, and Gonda of dependent claim 2 beyond those raised with respect to the rejection over Smith and McGinn of independent claim 1. App. Br. 11. As such, we sustain the rejection over Smith, McGinn, and Gonda of claim 2.

*Rejection over Smith, McGinn, and Abrams*

Appellants do not raise any arguments with respect to the rejection over Smith, McGinn, and Abrams of dependent claim 12 beyond those raised with respect to the rejections over Smith and McGinn and over Smith and Abrams of independent claim 1. App. Br. 11. As such, we sustain the rejection over Smith, McGinn, and Abrams of claim 12.

*New Grounds of Rejection*

Claim 37 has been rejected over Smith and Abrams, and we affirm that rejection above. Claims 38 and 39 each depend from claim 37. Claims 38 and 39 state:

38. A device as in claim 37, wherein the mechanism comprises a striking device disposed in the housing to quickly strike the receptacle.

39. A device as in claim 37, wherein the striking device comprises a spring-loaded lever arm, and a release apparatus to release the lever arm.

Claims 38 and 39 are rejected under 35 U.S.C. § 103(a) as unpatentable over Smith and Abrams as applied against claim 37 and additionally in view of McGinn. McGinn teaches a device having a mechanism to provide a pulse of energy to release medicament (p. 24, lines 8-18), wherein the mechanism comprises a striking device disposed in the housing to quickly strike the receptacle (p. 24, lines 8-11) as claimed in claim 38, and wherein the striking device comprises a spring loaded lever arm, and release apparatus to release the arm (p. 23, line 21 - p. 24, line 7) as claimed in claim 39. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to include the striking

mechanism of McGinn within Smith/Abrams as each of Smith and Abrams teach that it is desirable to free or deaggregate the medicament powder.

Claim 39 is also rejected under 35 U.S.C. § 112, ¶ 2 as indefinite because “the striking device” has no antecedent basis.<sup>3</sup>

### DECISION

The Examiner’s decision to reject claims 1-18, 21, 23-29, 37, 43-49, 61, and 62 is affirmed. The Examiner’s decision to reject claims 38 and 39 is reversed. We enter new grounds of rejection with respect to claims 38 and 39.

### FINALITY OF DECISION

Regarding the affirmed rejection(s), 37 CFR § 41.52(a)(1) provides that “Appellant[s] may file a single request for rehearing within two months from the date of the original decision of the Board.”

In addition to affirming the Examiner's rejection(s) of one or more claims, this decision contains new grounds of rejection pursuant to 37 C.F.R. § 41.50(b). 37 C.F.R. § 41.50(b) provides “[a] new ground of rejection pursuant to this paragraph shall not be considered final for judicial review.”

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<sup>3</sup> Claim 38, which depends from claim 37, recites that the mechanism comprises a “striking device,” but claim 39 depends from claim 37.

37 C.F.R. § 41.50(b) also provides that Appellants, WITHIN TWO MONTHS FROM THE DATE OF THE DECISION, must exercise one of the following two options with respect to the new grounds of rejection to avoid termination of the appeal as to the rejected claims:

(1) *Reopen prosecution*. Submit an appropriate amendment of the claims so rejected or new evidence relating to the claims so rejected, or both, and have the matter reconsidered by the examiner, in which event the proceeding will be remanded to the examiner. . . .

(2) *Request rehearing*. Request that the proceeding be reheard under § 41.52 by the Board upon the same record. . . .

Should Appellants elect to prosecute further before the Examiner pursuant to 37 C.F.R. § 41.50(b)(1), in order to preserve the right to seek review under 35 U.S.C. § 141 or 145 with respect to the affirmed rejection, the effective date of the affirmance is deferred until conclusion of the prosecution before the Examiner unless, as a mere incident to the limited prosecution, the affirmed rejection is overcome.

If Appellants elect prosecution before the Examiner and this does not result in allowance of the application, abandonment or a second appeal, this case should be returned to the Board of Patent Appeals and Interferences for final action on the affirmed rejection, including any timely request for rehearing thereof.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv).

AFFIRMED-IN-PART; 37 C.F.R. § 41.50(b)

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JRG